

ASG-Insight™

Quick Reference Guide

Version: 6.0

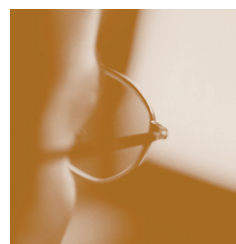
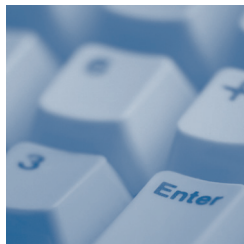
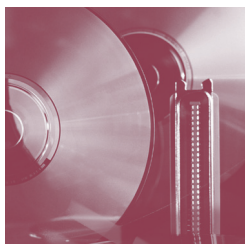
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Please have this information ready:

- Product name, version number, and release number
- List of any fixes currently applied
- Any alphanumeric error codes or messages written precisely or displayed
- A description of the specific steps that immediately preceded the problem
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Severity Codes and Expected Support Response Times

Severity	Meaning	Expected Support Response Time
1	Production down, critical situation	Within 30 minutes
2	Major component of product disabled	Within 2 hours
3	Problem with the product, but customer has work-around solution	Within 4 hours
4	"How-to" questions and enhancement requests	Within 4 hours

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England	44.1727.736305	44.1727.812018	support.uk@asg.com
France	33.141.028590	33.141.028589	support.fr@asg.com
Germany	49.89.45716.222	49.89.45716.400	support.de@asg.com
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United States and Canada	800.354.3578		
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France	00.800.3354.3578	Singapore	001.800.3354.3578
Germany	00.800.3354.3578	South Korea	001.800.9932.5536
Hong Kong	001.800.9932.5536	Sweden/Telia	009.800.9932.5536
Ireland	00.800.9932.5536	Switzerland	00.800.9932.5536
Israel/Bezeq	014.800.9932.5536	Thailand	001.800.9932.5536
Japan/IDC	0061.800.9932.5536	United Kingdom	00.800.3354.3578
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Visit <http://www.asg.com>, ASG's World Wide Web site.

Submit all product and documentation suggestions to ASG's product management team at <http://www.asg.com/asp/emailproductsuggestions.asp>.

If you do not have access to the web, FAX your suggestions to product management at (941) 263-3692. Please include your name, company, work phone, e-mail ID, and the name of the ASG product you are using. For documentation suggestions include the publication number located on the publication's front cover.

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Preface

This *ASG-Insight Quick Reference Guide* summarizes the command syntax and usage information for the ASG-Insight (herein called Insight) commands. Insight is a powerful interactive system that helps programmers by automating the process of analyzing COBOL programs.

Allen Systems Group, Inc. (ASG) provides professional support to resolve any questions or concerns regarding the installation or use of any ASG product. Telephone technical support is available around the world, 24 hours a day, 7 days a week.

ASG welcomes your comments, as a preferred or prospective customer, on this publication or on any ASG product.

About this Publication

The *ASG-Insight Quick Reference Guide* contains these chapters:

- [Chapter 1, "Command Language Syntax,"](#) provides a description and command syntax for the Insight commands.
- [Chapter 2, "Operand Definitions,"](#) defines the command operands.
- [Chapter 3, "Tree View Line Commands,"](#) lists the tree view commands valid for Insight.
- [Chapter 4, "Source View Line Commands,"](#) lists the source view commands valid for Insight.
- [Chapter 5, "Analyze Options,"](#) lists the options available to control the output format and to describe COBOL options.
- [Chapter 6, "VIASUB/VIASUBDS Parameters,"](#) lists the VIASUB/VIASUBDS parameters.
- [Chapter 7, "PF Key,"](#) lists the default and suggested alternate PF key settings.
- [Chapter 8, "Action Bar Equivalents To Commands,"](#) lists the pull-down and action equivalent to Insight commands.

Related Publications

The documentation library for ASG-Insight consists of these publications (where *nn* represents the product version number):

- *ASG-Center Installation Guide* (CNX0300-*nn*) contains installation and maintenance information for ASG-Center, the common set of libraries shared by the ASG-Existing Systems Workbench (ESW) suite of products.
- *ASG-Insight Installation Guide* (INX0300-*nn*) provides instruction about the installation and maintenance of ASG-Insight.
- *ASG-Insight Quick Reference Card* (INX0900-*nn*) provides a summary of the commands and functions within ASG-Insight.
- *ASG-Insight Quick Reference Guide* (INX0600-*nn*) summarizes the syntax and use of ASG-Insight commands.
- *ASG-Insight Reference Guide* (INX0400-*nn*) provides detailed information about the pop-ups, screens, and commands used in ASG-Insight, including field descriptions, usage notes, and command syntax.
- *ASG-Insight User's Guide* (INX0200-*nn*) provides user information for ASG-Insight.

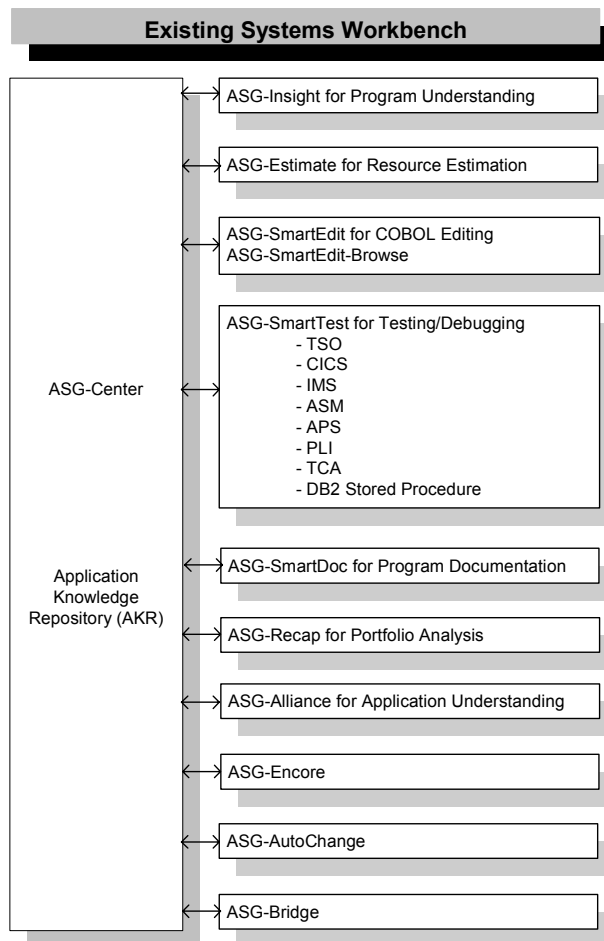
Note: _____

To obtain a specific version of a publication, contact the ASG Service Desk.

ASG-Existing Systems Workbench (ASG-ESW)

ASG-ESW (herein called ESW) is an integrated suite of components designed to assist organizations in enhancing, redeveloping, or re-engineering their existing systems. ESW products use the Application Knowledge Repository (AKR) to store source program analysis information generated by the Analytical Engine. [Figure 1](#) represents the components of ESW.

Figure 1 • ASG Existing Systems Workbench



This table contains the name and description of each ESW component:

ESW Product	Herein Called	Description
ASG-Alliance	Alliance	The application understanding component that is used by IT professionals to conduct an analysis of every application in their environment. Alliance supports the analysis and assessment of the impact of change requests upon an entire application. Alliance allows the programmer/ analyst to accurately perform application analysis tasks in a fraction of the time it would take to perform these tasks without an automated analysis tool. The impact analysis from Alliance provides application management with additional information for use in determining the resources required for application changes.
ASG-AutoChange	AutoChange	The COBOL code change tool that makes conversion teams more productive by enabling quick and safe changes to be made to large quantities of code. AutoChange is an interactive tool that guides the user through the process of making source code changes.
ASG-Bridge	Bridge	The bridging product that enables field expansion for program source code, without being required to simultaneously expand the fields in files or databases. Because programs are converted in smaller groups, or on a one-by-one basis, and do not require file conversion, testing during the conversion process is simpler and more thorough.

ESW Product	Herein Called	Description
ASG-Center	Center	The common platform for all ESW products. Center provides the common Analytical Engine to analyze the source program and store this information in the AKR. This common platform provides a homogeneous environment for all ESW products to work synergistically.
ASG-Encore	Encore	The program re-engineering component for COBOL programs. Encore includes analysis facilities and allows you to extract code based on the most frequently used re-engineering criteria. The code generation facilities allow you to use the results of the extract to generate a standalone program, a callable module, a complement module, and a CICS server. Prior to code generation, you can view and modify the extracted Logic Segment using the COBOL editor.
ASG-Estimate	Estimate	The resource estimation tool that enables the user to define the scope, determine the impact, and estimate the cost of code conversion for COBOL, Assembler, and PL/I programs. Estimate locates selected data items across an application and determines how they are used (moves, arithmetic operations, and compares). Time and cost factors are applied to these counts, generating cost and personnel resource estimates.

ESW Product	Herein Called	Description
ASG-Insight	Insight	The program understanding component for COBOL programs. Insight allows programmers to expose program structure, identify data flow, find program anomalies, and trace logic paths. It also has automated procedures to assist in debugging program abends, changing a computation, and resolving incorrect program output values.
ASG-Recap	Recap	The portfolio analysis component that evaluates COBOL applications. Recap reports provide function point analysis and metrics information, program quality assessments, intra-application and inter-application comparisons and summaries, and historical reporting of function point and metrics information. The portfolio analysis information can also be viewed interactively or exported to a database, spreadsheet, or graphics package.
ASG-SmartDoc	SmartDoc	The program documentation component for COBOL programs. SmartDoc reports contain control and data flow information, an annotated source listing, structure charts, program summary reports, exception reports for program anomalies, and software metrics.

ESW Product	Herein Called	Description
ASG-SmartEdit	SmartEdit	The COBOL editing component that can be activated automatically when the ISPF/PDF Editor is invoked. SmartEdit provides comprehensive searching, inline copybook display, and syntax checking. SmartEdit allows you to include an additional preprocessor (for example, the APS generator) during syntax checking. SmartEdit supports all versions of IBM COBOL, CICS, SQL, and CA-IDMS.
ASG-SmartTest	SmartTest	The testing/debugging component for COBOL, PL/I, Assembler, and APS programs in the TSO, MVS Batch, CICS (including file services), and IMS environments. SmartTest features include program analysis commands, execution control, intelligent breakpoints, test coverage, pseudo code with COBOL source update, batch connect, disassembled object code support, and full screen memory display.

Invoking ESW Products

The method you use to invoke an ESW product depends on your system setup. If you need assistance to activate a product, see your systems administrator. If your site starts a product directly, use the ISPF selection or CLIST as indicated by your systems administrator. If your site uses the ESW screen to start a product, initiate the ESW screen using the ISPF selection or CLIST as indicated by your systems administrator and then typing in the product command on the command line.

The product names can also vary depending on whether you access a product directly or through ESW. See "ESW Product Integration" on page xiv for more information about using ESW.

To initialize ESW products from the main ESW screen, select the appropriate option on the action bar pull-downs or type the product shortcut on the command line.

Product Name	Shortcut	ESW Pull-down Options
Alliance	AL	Understand ► Application
AutoChange	CC	Change ► Conversion Set
Bridge	BR	Change ► ASG-Bridge
Encore (Re-engineer)	EN	Re-engineer ► Program
Estimate	ES	Measure ► ASG-Estimate
Insight (Understand)	IN	Understand ► Program
Recap (Portfolio Analysis)	RC	Measure ► Portfolio
SmartDoc (Document)	DC	Document ► Program
SmartEdit	SE	Change ► Program Or Change ► Program with Options
SmartTest	ST	Test ► Module/Transaction

ESW Product Integration

Because ESW is an integrated suite of products, you are able to access individual ESW products directly or through the main ESW screen. As a result, you might see different fields, values, action bar options, and pull-down options on a screen or pop-up depending on how you accessed the screen or pop-up.

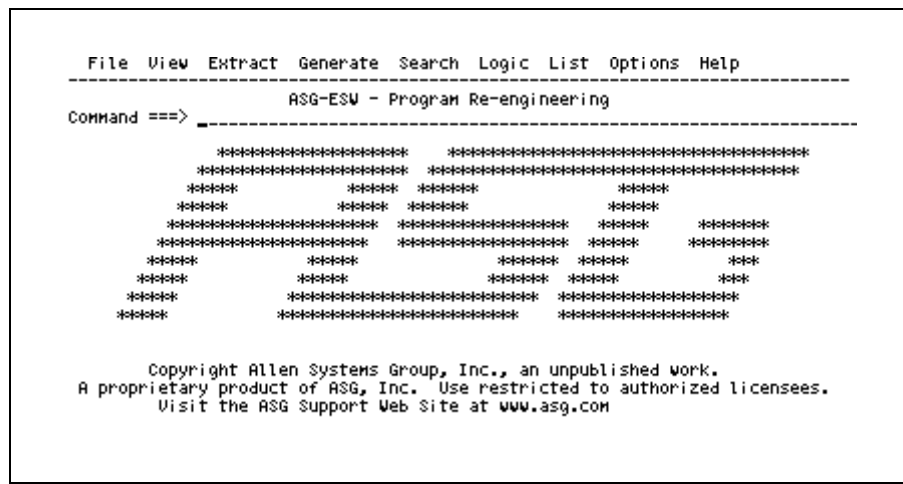
Certain ESW products also contain functionality that interfaces with other ESW products. Using SmartTest as an example, if Alliance is installed, Insight provides a dynamic link to Alliance that can be used to display program analysis information. If Insight is installed and specified during the analyze, the Insight program analysis functions are automatically available for viewing logic/data relationships and execution path. For example, the Scratchpad option is available on the Options pull-down if you have Insight installed. Access to these integrated products requires only that they be installed and executed in the same libraries.

The Encore Primary screen contains these eight action bar menu items: File, View, Extract, Generate, Search, List, Options, and Help.

Figure 2 • Encore Primary Screen

[illegible]

Figure 3 • ESW Encore Primary Screen



Notice that the Analyze features field in [Figure 5 on page xvii](#) lists additional ESW products than shown on [Figure 4 on page xvii](#). This field is automatically customized to contain the ESW products you have installed on your system.

The actions shown on these screens also vary. For example, the D action (ASG-SmartDoc Options) is available on the File - Analyze Submit screen if the SmartDoc product is installed on your system. In [Figure 4](#), the ASG-SmartDoc Options action is not available.

Figure 4 • File - Analyze Submit Screen

```

                                File - Analyze Submit
Command ==> -----

          E - Edit JCL                      S - Submit JCL

Compile and link JCL (PDS or sequential):
  Data set name 'USER12.REL.CNTL(UIAPC0BC)'

Analyze features (Y/N):
  ASG-SmartTest: Y   Extended Analysis: N

AKR data set name 'USER12.GENERAL.AKR'
AKR program name           (if overriding PROGRAM-ID)

Analyze options:
-----
-----
-----

Compile? (Y/N) . . . . . Y   (Y if needed by features)
Link load module reusable? (Y/N) Y

```

Figure 5 • File - Analyze Submit Screen (Accessed through ESW)

```

                                File - Analyze Submit
Command ==> -----

          E - Edit JCL      S - Submit JCL      D - ASG-SmartDoc Options

Compile and link JCL (PDS or sequential):
  Data set name 'USER12.REL.CNTL(HTEST)'

Analyze features (Y/N):
  ASG-Insight: Y   ASG-SmartTest: Y   Extended Analysis: N
  ASG-SmartDoc: N   ASG-Encore: N
AKR data set name 'USER12.GENERAL.AKR'
AKR program name           (if overriding PROGRAM-ID)

Analyze options:
-----
-----
-----

Compile? (Y/N) . . . . . Y   (Y if needed by features)
Link load module reusable? (Y/N) Y   (ASG-SmartTest)

```

Conventions

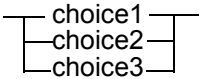
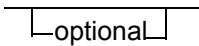
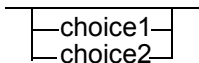
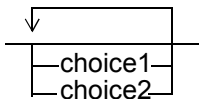
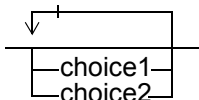
These highlighting conventions are used in this guide:

Convention	Represents
ALL CAPITALS	Directory, path, file, dataset, member, database, program, command, and parameter names.
Initial Capitals on Each Word	Window, field, field group, check box, button, panel (or screen), option names, and names of keys. A plus sign (+) is inserted for key combinations (e.g., Alt+Tab).
<i>lowercase italic monospace</i>	Information that you provide according to your particular situation. For example, you would replace <i>filename</i> with the actual name of the file.
Monospace	Characters you must type exactly as they are shown. Code, JCL, file listings, or command/statement syntax. Also used for denoting brief examples in a paragraph.
Vertical Separator Bar () with underline	Options available with the default value underlined (e.g., Y <u>N</u>).

1

Command Language Syntax


Item	Description
ABBREVIations	Illustrates the command abbreviation, which is shown in uppercase letters. Lowercase letters in the command are optional.
lowercase	Indicates user-supplied variable information.
UPPERCASE	Indicates commands or keywords.
Bold	Indicates operands that are available only if Insight is installed and a Insight analysis has been run on the COBOL program being tested.
<u>Underline</u>	Specifies the default value of an operand.
	Separates synonymous commands or operands.
—————→	Indicates that the command syntax is continued on the next line.
→—————	Indicates the command syntax is continued from the previous line.
—————✕	Indicates the end of the command syntax.
— required —	Indicates that the operand or keyword appearing on the main command line is required.

Item	Description
	Indicates that one operand is required.
	Indicates that an operand or keyword appearing below the main command line is optional.
	Indicates that operands are optional.
	Indicates that more than one operand can be chosen.
	Indicates that operands can be concatenated by placing a plus sign (+) between them.

Insight supports all ISPF/PDF system commands on the appropriate screens (e.g., UP, DOWN, KEYS). Targets are searched in the order listed. Select a particular target by entering the optional target-type prefix (e.g., SUBSET, LABEL, DATA). Data name subordinate operands (e.g., REF, ALIAS) pertain to all datanames in a concatenated series. For COBOL II Release 3 and later programs, qualify a data item, label name, or program name that may either be ambiguous or used multiple times by using OF followed by the program name.

& (Retain)

Executes the specified primary command and keeps it on display in the command input area for repeated use or modification.

&any primary command  



ALLOCDEF

Displays the Options - Product Allocations pop-up used to specify the DASD volumes for the Log, List, Punch, and Work files; and to specify space for the Work file.

ALLOCDEF | ADEF  

ANALYZE

Displays the File - Analyze Submit pop-up used to submit a compile/analyze job without actually ending the current Insight function. Enter this command on any screen.

ANalyze  

BRANCH

Positions the cursor at the specified target. The BRANCH command is helpful when you are tracking branching logic. Use BRANCH to scroll from a statement such as a PERFORM, to the paragraph being performed. You can then use the BACKUP operand to return to the statement where the branch occurred. PREVIOUS is used in conjunction with the current cursor location, to position the cursor at the GO TO, PERFORM, or CALL statement from where a target was reached.



CALL

Starts a Source View session for another program without ending the current session. Use the GOBACK and END commands to return to the original program. The CALL command provides a means of following logic paths across CALLED programs. CALL remembers the location within the CALLing program and displays the CALLED program. If you do not specify a program, the AKR Program Selection pop-up displays and allows you to select the program.



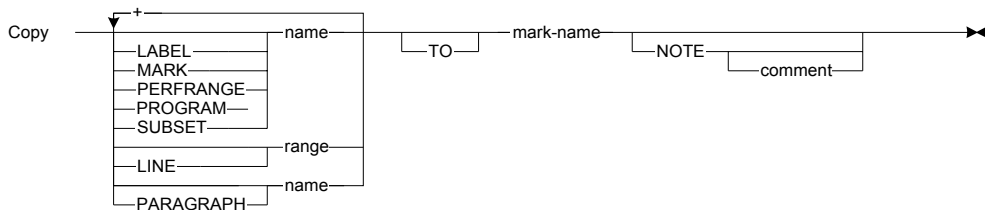
CANCEL

Terminates the current function without saving changes made during the session.

CANcel →

COPY

Copies the contents of a path or a set of lines to a mark. This allows you to save the same information under a different name for additional use. Include a new description, if desired. You can copy the same path or set of lines to different names. The TO mark-name you specify must be unique. If you do not specify an existing mark-name an error message displays and the copy function is not performed.



CURRENT

Saves the current location of the cursor for later use with the LOCATE &CURRENT command.

CURRent —————>>

DELETE

Deletes a mark name and its contents. If the mark name does not exist, an error message displays. This command is also used to delete a mark name, path, or set of lines from an existing mark name.

DELeTe —————>>

markname1			
markname2			
LABEL	name	IN	markname3
PERFRANGE			
PROGRAM			
SUBSET			
PARAGRAPH			
	range		
LINE			

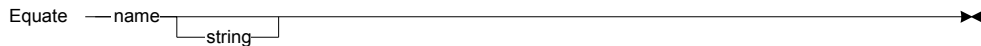
END

Terminates the current function and redisplay the previous function or screen. Enter this command and desired operands in the command input area, or enter just the operands and press PF3/PF15. If you enter the END command with no operands, the values specified on the Options - Product Parameters pop-up are used to determine if Marks and Equates are to be saved.



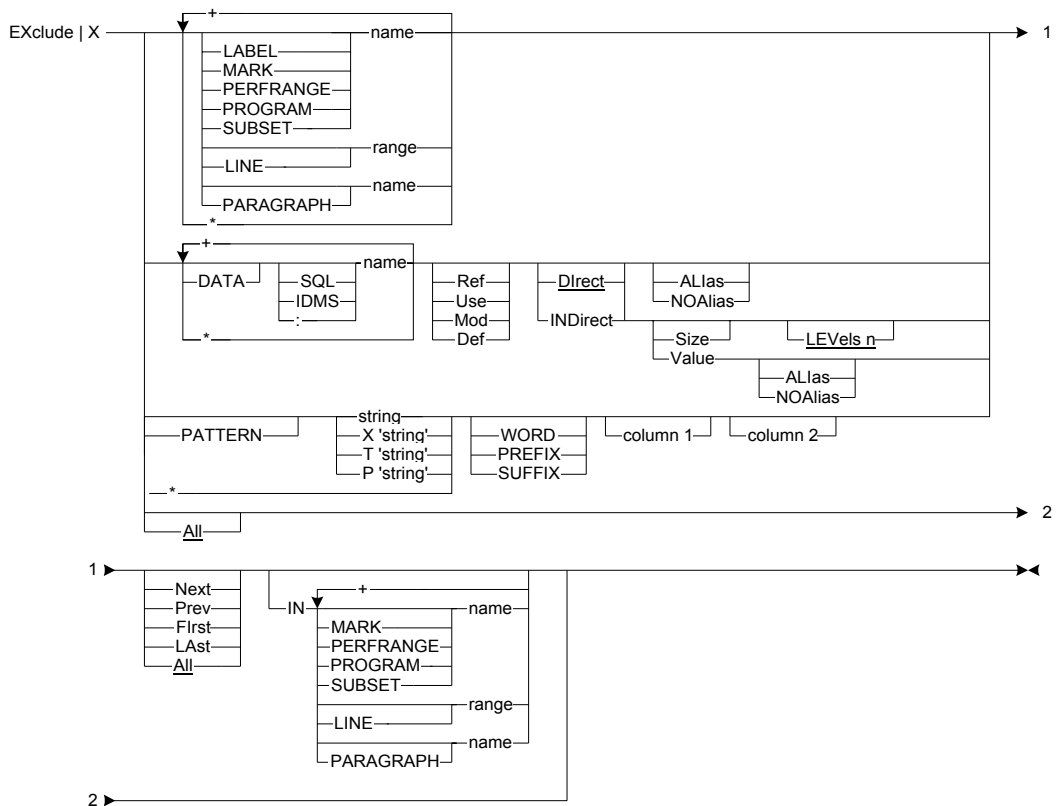
EQUATE

Defines a name for a character string. A character string is a long command, operand set, pattern, dataname, etc. To reduce the number of keystrokes, use the equated names during Insight sessions. Use multiple Equate statements, and save them in the AKR (see ["SAVE" on page 28](#)). To delete an equated name, enter the EQUATE command and the name without the string. Change the substitution string on the List - Equates pop-up by typing over it with the new value.



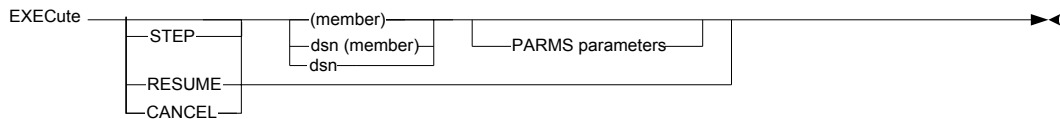
EXCLUDE

Performs a FINDXTND command on a specific target, excluding the resulting lines. Excluded lines are represented by a line of dashes and text stating *n* LINE(S) NOT DISPLAYED. You can also use the X or XX line commands to exclude lines from the screen.



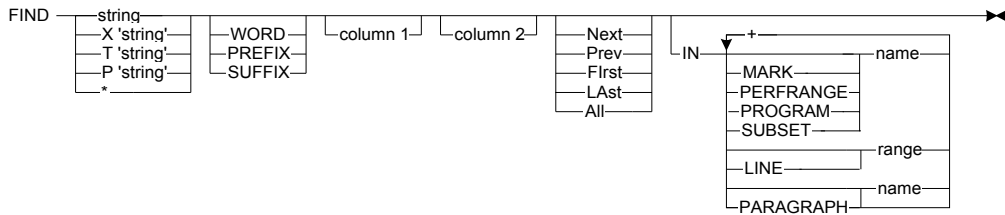
EXECUTE

Reads and executes an Insight script file. Script files can contain EXECUTE commands that execute lower level (nested) script files. The STEP operand causes each successive command in the script to be displayed in the command input area. Change the command, if desired. Entering RESUME when in STEP mode executes the remaining script file commands without stepping through each. Entering CANCEL stops without processing the remaining script file commands. Script files that create a loop are recognized and an error message displays.



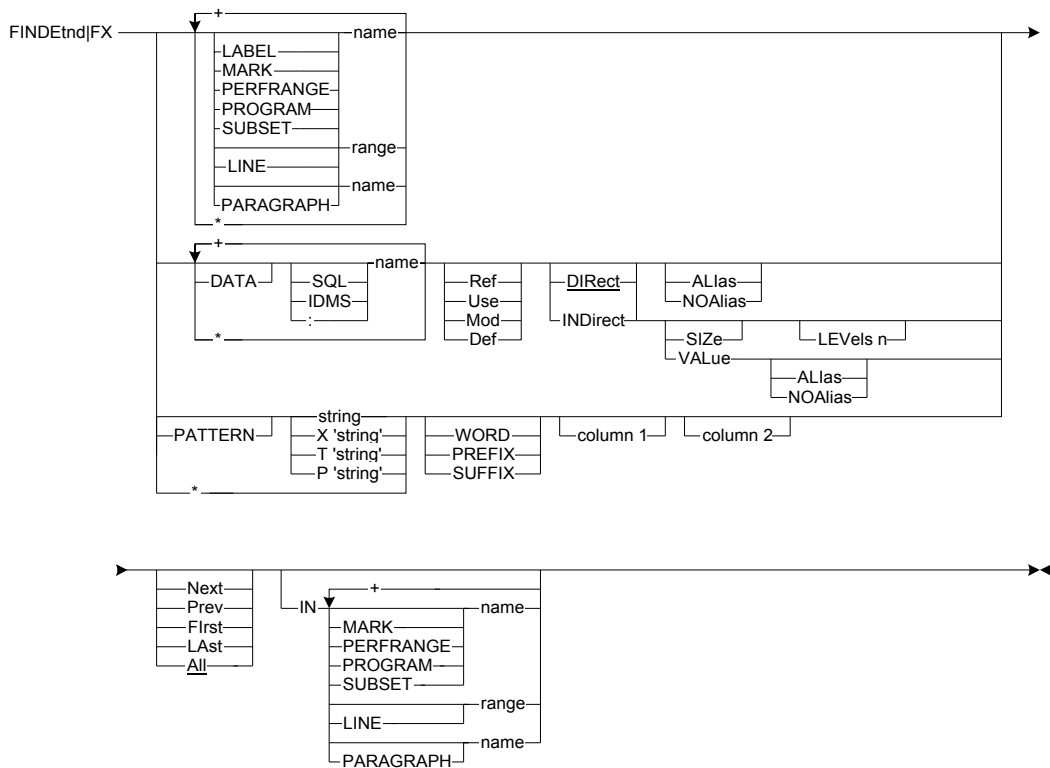
FIND

Searches for one or all occurrences of the specified character string. The search begins from the current line when you specify the NEXT or PREV operands. All lines are searched regardless of the current line or direction when you specify the ALL operand. Any excluded lines containing FIND targets are displayed and highlighted. The IN operand restricts the FIND command to only the targets you specified. To locate DBCS strings specify double byte character sets (DBCS) identifiers or patterns with the FIND command.



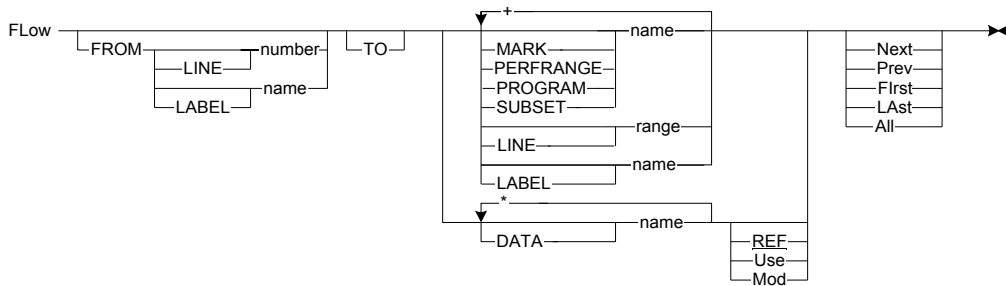
FINDXTND

Performs a COBOL intelligent search of the source code for one or all of the occurrences of the target you specified. If you exclude lines containing results, they redisplay on the screen. Tags indicating the type of target found show in columns 73 through 80 of Source View.



FLOW

Identifies all possible execution paths from a given point in a program searching for the specified target(s). Identified paths are stored with mark names of NETWORK and SUBNET n . The FLOW command determines the execution flow of a program and indicates whether the targets you specified can be reached from a given point. If you do not specify the FROM operand, the cursor location is used as the starting point.



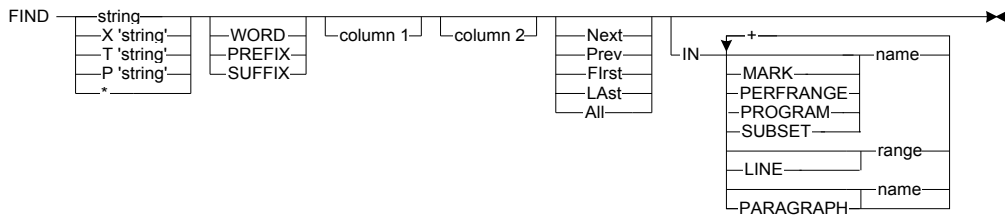
GOBACK

Reverses a CALL or VIEW command and returns to a Source View session. If you do not enter the program operand, the program where the last CALL or VIEW was executed is returned to the Source View screen. If you do not specify the SAVE or NOSAVE operand, the values from the Options - Product Parameters pop-up are used.



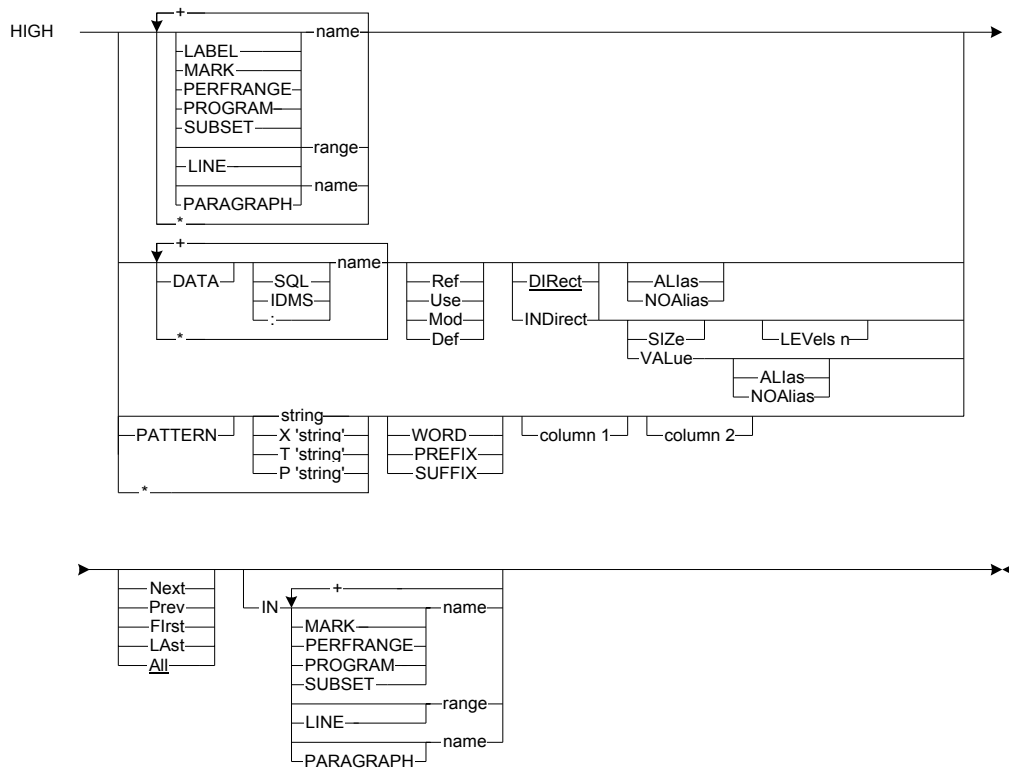
HELP

Displays information about the current Insight screen, command or error message. Help is presented as a long message or a tutorial screen. After you access the Help Tutorial, type INDEX and press Enter to display the Index, or type TOC and press Enter to display the Table of Contents.



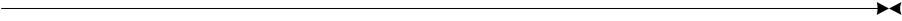
HIGH

Highlights source code lines containing the specified targets. Lines already highlighted from prior commands are not reset.



JUMP

Returns to the Source View screen at the location corresponding to the cursor position on the Tree View screen.

JUMP 

KEYS

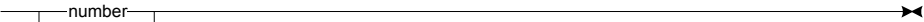
Displays the Options - PF Key Definition pop-up used to display and/or modify the current Insight PF key assignments. Enter the KEYS command on any screen. Values assigned to the Insight PF keys have no effect on other ISPF applications.

KEYS 

SAVE	dsn
	dsn (member)
LOAD	dsn
	dsn (member)
PFnn	string

LEVELS

Redisplays the Tree View screen to the nth level. If there are less than n levels displayed, they will be expanded to the requested level. If there are greater than n levels displayed, they are removed.

LEVELS 

number
MAX

LIST

Displays the specified pop-up. LIST with no operand displays the List Menu pop-up.



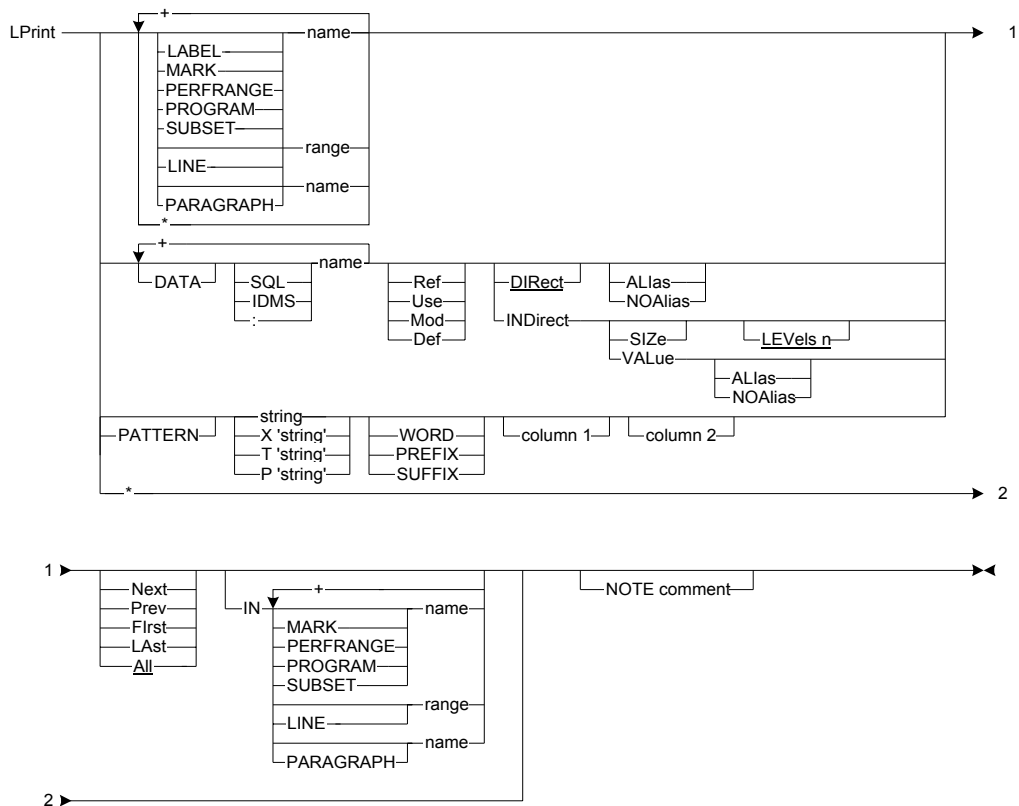
LOCATE

Scrolls to the selectable entry that most closely matches the string or label that you specified. LOCATE is valid on the Source View screen, File - AKR Directory pop-up, File - AKR Program Selection pop-up, all List pop-ups (except the List - Program/Subprogram Names pop-up), and the Trace Decision Options pop-up.



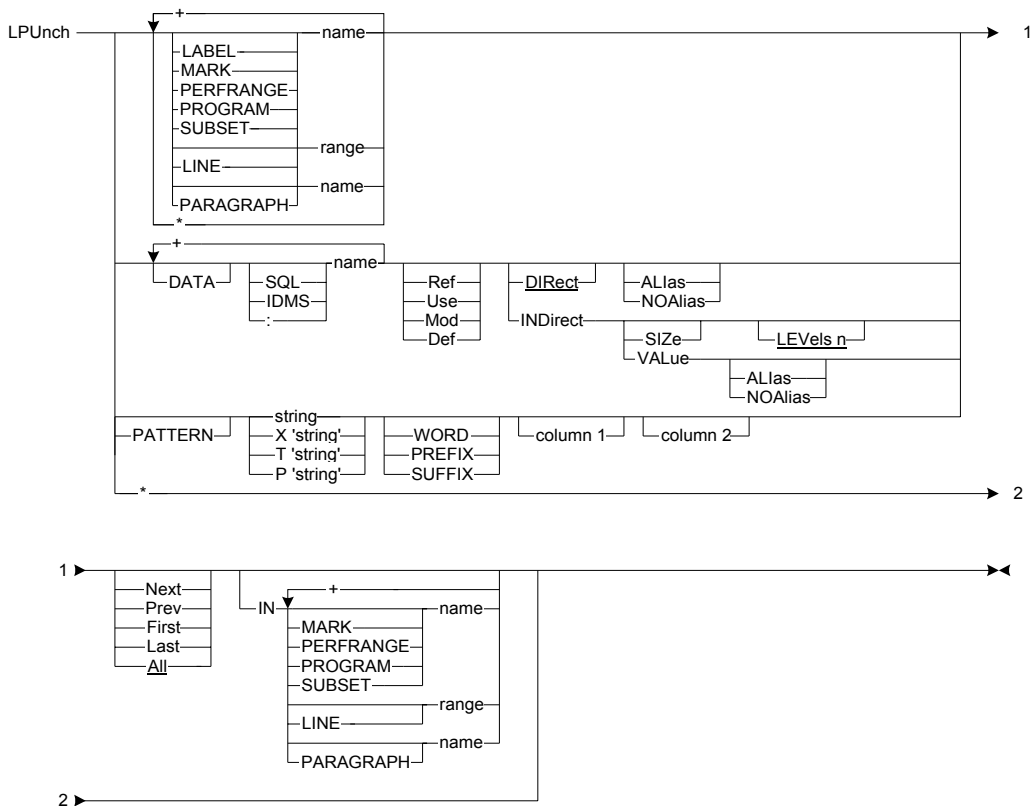
LPRINT

Copies lines containing the requested target to the List file. Enter LPRINT * to copy the entire virtual screen (all data viewed by scrolling forward and backward) to the List file.



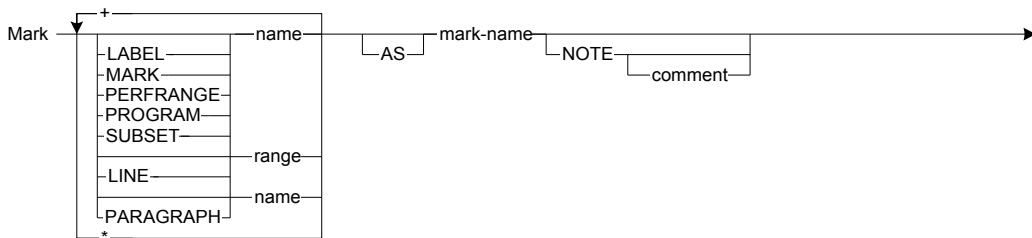
LPUNCH

Copies lines containing the specified target to the Punch file for subsequent processing. Enter LPUNCH * to copy the entire virtual screen (all data viewed by scrolling forward and backward) to the Punch file.



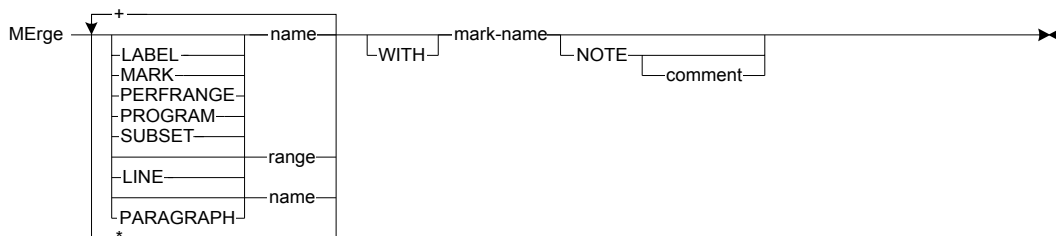
MARK

Saves the requested target as a Mark set or path. You can save the target of a MARK command multiple times under different names.



MERGE

Adds the lines from the specified target to the Mark name you specified. If the specified Mark name does not exist, it is created. Include a comment with the MERGE command to replace an existing one. You can merge a set of lines with another set of lines, or you can merge a path to a set of lines.



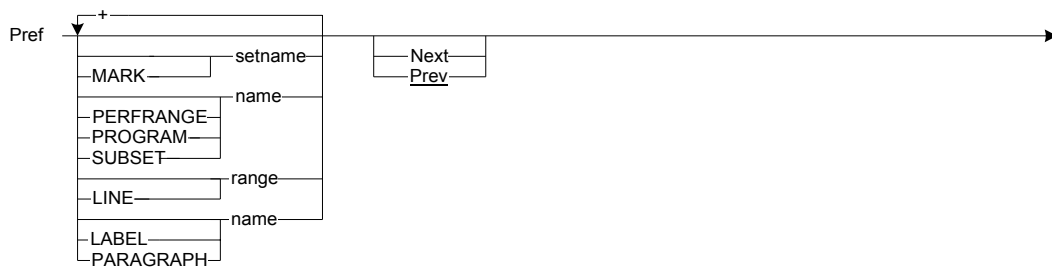
PARMDEF

Displays the Options - Product Parameters pop-up used to set parameters that affect the online operation of Insight.

PARMDEF | PDEF

PREF

Displays the View - Paragraph Cross Reference pop-up for the target you requested. The View - Paragraph Cross Reference pop-up shows how control is transferred to or from the target. PREF includes all paragraphs containing the target lines.




PRINTLOG

Displays the Options - Log/List/Punch Definition pop-up used to process the Log, List, and Punch files. Enter the PRINTLOG command on any Insight screen.

PRINTLOG | PLOg 


PRINTLST

Displays the Options - Log/List/Punch Definition pop-up used to process the Log, List, and Punch files. Enter the PRINTLST command on any Insight screen.


PRINTLST | PLIst 

PROCESS

Defines an action to be performed repetitively on a file of input items. This file may contain the results list from an ASG-ESW product, or the file can be nested by the user. The model command can be any ASG-ESW product command that is valid in a Script file and can be defined using substitution variables.

PROCeSS  STEP

(member)
dsn (member)
'dsn'
'dsn (member)'

 model command 

PRODLVL

Displays the current Insight and Center product level on the message line, including the product name, operating system, product release number and level.

PRODLVL 

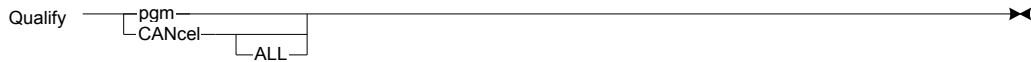
PROGRAM

Ends the current Source View screen and enters a new session for the program you specified. Using PROGRAM is the easiest way of switching to another program; however, the calling sequence is not saved and you cannot use the GOBACK command to return to a previous program. If you do not specify the new program, the File - AKR Program Selection pop-up displays. If you do not specify the SAVE or NOSAVE operand, the values you entered on the Options - Product Parameters pop-up are used to determine if Marks and Equates are to be saved.

PROgram 


QUALIFY

Displays the program you specified on the Source View screen for investigation. The qualified program becomes the current program, and program understanding commands operate on the qualified program. Qualify additional programs as required.



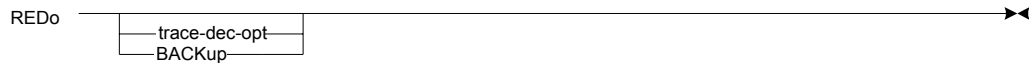
RECALL

Displays the previous primary command, pop-up, or message. The last 20 commands that have been executed and the last 20 messages that have been displayed are stacked. To redisplay these commands or messages in sequential order, use the RECALL command. The POPUP operand redisplay the most recent pop-up.



REDO

Executes the corresponding repeat command after execution of the FIND, FINDXTND, HIGH, PREF, SCROLL, or TRACE command.



REFRESH

Updates the CALL summaries in the current program for an CALLEd program that has been analyzed since opening the current program.



RENAME

Changes the name of a Mark path or set of lines. An error message displays if the Mark name to be renamed does not exist, or if the Mark name you are trying to assign already exists.



REPEAT

Re-executes the last stacked primary command from the cursor position.

REPEAT _____

RESET

Turns off highlighting, erases tags, redisplay excluded lines, cancels pending line commands, and terminates message line displays. Specify any combination of operands.

RESET

↓
All
Hi
Tag
Excluded X
Lines
Message
line range
MARK

RETURN

Terminates the current function and returns to the primary screen. RETURN simulates multiple END commands, returning directly to the primary screen and providing a quick way to end an Insight function. If you enter the RETURN command without an operand, the values specified on the Options - Product Parameters pop-up are used to determine if Marks and Equates are to be saved.



RFIND

Repeats the last FIND or FINDXTND command from the cursor position. The search is in the direction indicated in the last FIND or FINDXTND command.



RHIGH

Repeats the last HIGH command from the cursor position.



RPREF

When on the Source View screen, use RPREF to redisplay the last View - Paragraph Cross Reference pop-up. If you enter RPREF without entering a PREF command, RPREF functions as a PREF command with the current cursor location as the target and default direction.

RPref _____ ➤

RSCROLL

Repeats the last SCROLL command from the cursor position.

RSCroll _____ ➤

RSTRUCTURE-VIEW

Returns to the previous Perform Structure View screen.

RSTRUCTure-view | RSTView _____ ➤

RTRACE

Continues the last TRACE command from where it stopped. Use BACKUP to return to the last decision point, to follow a different path. Enter RTRACE with no operand to display the Trace Decision Options pop-up.



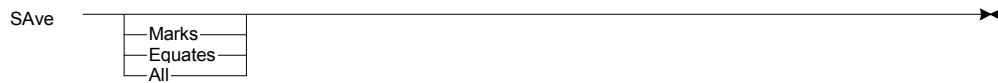
RTREEVW

Returns to the previous Tree View screen.



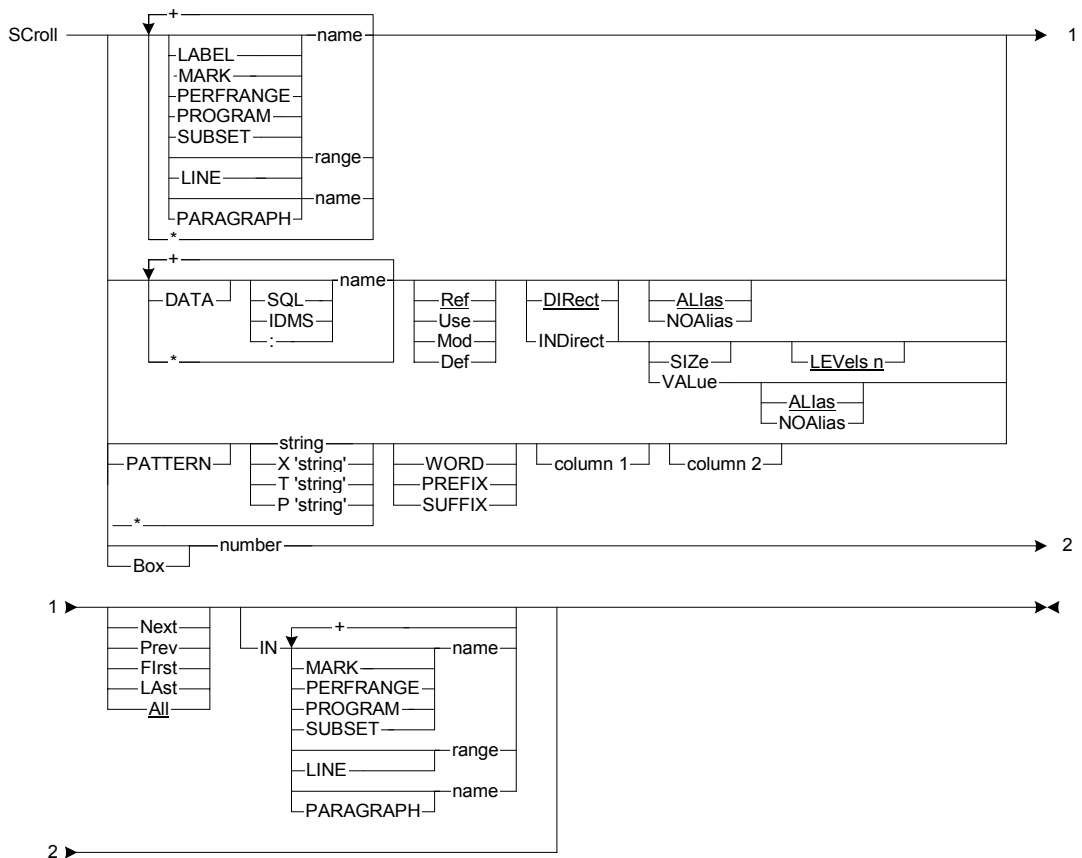
SAVE

Saves Marks, and/or Equates in the AKR. This command overrides the values set on the Options - Product Parameters pop-up.



SCROLL

Scrolls to the first line or box containing the specified target without resetting highlighted lines or boxes.



SELECT

Selects an option on the Trace Decision Options pop-up and the AKR Program Selection pop-up. To select an item on any screen with a selection field, enter an S to the left of the displayed items.

Select

trace-dec-opt
pgm

 _____ ➤

SET

Enables or disables the mode indicated by the specified operand. If entered without any operands, the Options - Processing Modes pop-up displays showing the current setting for each SET command mode. You can also change modes on the Options -Processing Modes pop-up.

SET

LEarn
SCript
RESULT
XMode

ON
OFF

 _____ ➤

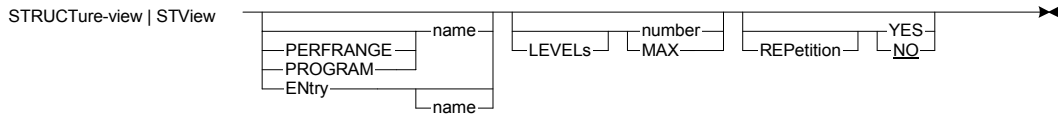
SOURCEVIEW

Displays the Source View screen that shows the program in source code format

SOURCEVIEW | SView _____ ➤

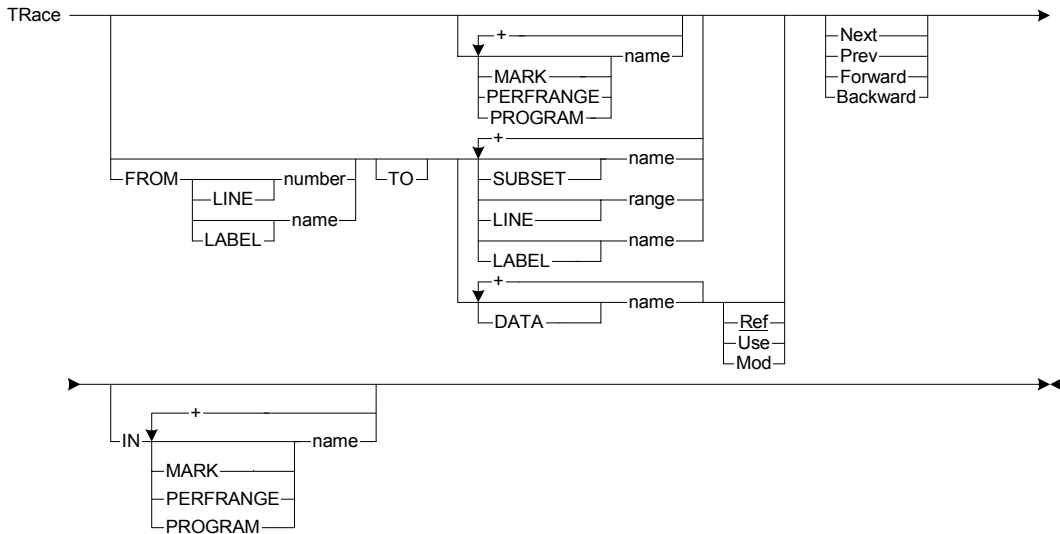
STRUCTURE VIEW

Transfers the display of the program being viewed to the Perform Structure View screen. If you do not specify either a target or a level, the default is the main program at level 2.



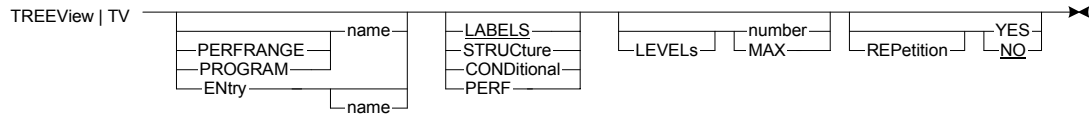
TRACE

Follows the execution of a program, searching for the specified target. When you enter the TRACE command without an operand, the trace begins at the cursor position and continues to the program exits. The MARK and PERFRANGE operands trace the statements represented by the MARK or PERFRANGE name. Tracing to a SUBSET name, LINE range, LABEL name, or DATA name traces from the starting point to the lines represented by these targets.



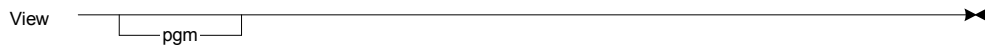
TREEVIEW

Displays the Tree View screen that shows the structural representation of a COBOL program in logical execution order. If you did not specify either a target or a level, the default is the main program at level 2.



VIEW

Starts a new Source View session for the specified program while retaining the current session. Use the GOBACK or END command to return to the original program. If you do not specify a program, the AKR Program Selection pop-up displays so that you can select the program.



ZOOMIN/ZOOMOUT

Displays or excludes source code lines according to the hierarchical levels of the program. Use in conjunction with each other to show the structure of a program and provide a means of stepping through each level or going directly into or out of a particular section of source code.

ZOOMIn | ZI _____ ➡❏

ZOOMOut | ZO _____ ➡❏

2

Operand Definitions

Operand	Description
<i>*</i>	Reuses the target of the previous command. The asterisk (*) can be concatenated once with any number of other operands; however, the * cannot be concatenated to itself.
<i>: name</i>	Includes datanames that are COBOL variables only.
<i>cmd</i>	An Insight primary command.
<i>column1</i>	The column number where the search is to begin.
<i>column2</i>	The column number where the search is to end.
<i>comment</i>	Text following the NOTE operand that describes the name.

Operand	Description
DATA <i>name</i>	<p>A COBOL dataname or qualified COBOL dataname. DATA name refers to any valid COBOL reference for a data element. The DATA name operand also accepts:</p> <p>Use Occurrences of the dataname where its value is tested or used (including aliases unless using NOALIAS).</p> <p>Mod Occurrences of the dataname where its value is set or modified (including aliases unless using NOALIAS).</p> <p>Def Definitions for the dataname in the DATA DIVISION (including aliases unless using NOALIAS).</p> <p><u>Ref</u> Use, Mod and Def.</p> <p><u>ALias</u> Includes aliases of the dataname.</p> <p>NOAlias Does not include aliases.</p> <p><u>DIRect</u> Considers only the specified dataname.</p> <p>INDirect Includes occurrences of any dataname indirectly affected by the specified dataname (and aliases, if specified).</p> <p><u>SIZE</u> Considers datanames indirectly affected by a change in the size of the specified dataname.</p> <p>VALue Considers datanames directly or indirectly affected by a change in the value of the specified dataname.</p> <p>LEVels <i>n</i> Identifies the depth of the indirect references.</p>
ENTRY <i>name</i>	An entry point name. If you specify ENTRY without a name, the main program and all ENTRY points are included.
IDMS <i>name</i>	Includes datanames that are IDMS variables only.

Operand	Description
<i>.label</i>	A line label entered in the prefix area (columns 1 through 6) on the Program View screen.
<i>LABEL name</i>	Any paragraph or section name of the PROCEDURE DIVISION, as well as the literals PROCEDURE and PROC. This includes all transfers of control to the label name.
<i>LEVELS number</i>	Lowest to highest hierarchical level of code.
<i>LINE number</i>	A single line number.
<i>LINE range</i>	A single line number or range of lines.
<i>mark-name</i>	A name assigned to a path or set of lines using the COPY, MARK, MERGE or RENAME command, or a system-generated path. Mark-name can be up to 10 alphanumeric characters, or 4 DBCS characters, beginning with an alphabetic character, and can include hyphens.
<i>MARK name</i>	<p>A 1-10 alphanumeric character name given to a set of lines or a path using the COPY, MARK, MERGE or RENAME command, or one of these system-generated paths:</p> <p>TRACK TRK Created by a TRACE command.</p> <p>NETWORK NET Created by a FLOW command.</p> <p>SUBNET_n SUB_n A path created by the FLOW command that reaches from the beginning of the NETWORK to one of the results.</p> <p>TRACK, NETWORK, and SUBNET can also be created using one of the Logic Order Search pop-ups</p>

Operand	Description
MARK <i>setname</i>	A 1-10 character alphanumeric name given to a set of lines using the COPY, MARK, MERGE or RENAME command.
<i>model command</i>	Any ASG product command that is valid in a Script file and can be defined using substitution variables.
<i>msg#</i>	The number of an error message or information message.
<i>name</i>	A name for a character string. Name can be up to 10 alphanumeric characters, beginning with an alphabetic character, and can include hyphens. Name can also be a PERFRANGE name, LABEL name, DATA name or SUBSET name. See the specific operand for more information.
NOTE <i>comment</i>	A user-supplied description.
<i>number</i>	A single line number.
PARAGRAPH <i>name</i>	Any paragraph or section name of the PROCEDURE DIVISION, as well as the literals PROCEDURE and PROC. PARAGRAPH name includes the entire paragraph or section.

Operand	Description
PATTERN <i>string</i>	<p>A string of alphanumeric characters. If the string contains blanks, it must be enclosed in quotes. The PATTERN string operand also accepts:</p> <p>X 'string' Hexadecimal string.</p> <p>T 'string' Text string.</p> <p>P 'string' Picture string.</p> <p>WORD Pattern string directly preceded and followed by any non-alphanumeric characters other than hyphens.</p> <p>PREFIX Word that begins with the pattern.</p> <p>SUFFIX Word that ends with the pattern.</p>
PERFRANGE <i>name</i>	The name specified in a PERFORM statement. It includes all the statements that are executed as a result of a PERFORM statement. The name of any section contained in the Declaratives.
<i>pgm</i>	A CSECT contained in a load module.
PROGRAM <i>name</i>	The name of the main program or any nested program representing all the code contained in the program. This includes all the programs physically nested inside the specified program.
<i>setname</i>	A MARK name of type set (i.e., cannot be a path). See the MARK setname operand for more information.
SQL <i>name</i>	Includes datanames that are DB2/SQL variables only.
<i>string</i>	A character string to be substituted by the EQUATE command. Also, a string of alphanumeric characters. See the PATTERN string operand for more information.

Operand	Description		
SUBSET <i>name</i>	COBOL verbs of a similar nature that have been grouped together. Predefined COBOL language subsets (Bold subsets are available only if an Extended Analysis has been performed):		
	ASsignment	DEBug	IO
	CAll	DEFinition	LABel
	CIcs	DIRective	MAINline
	COBOLII	DIVision	MATH
	COBOL/370	DL/I DL/1	Output
	COMment	DML	PARagraph
	CONditional	ENtry	PERform
	COPy	EXIt PGMExit	RETurn
	DB2/SQL	FALLthrough	SECTion
	DDL	GOto	SORTMerge
	DEAD	IDMS	STructure
	DEADCode	INClude	TAG
	DEADData	Input	TESTed
	UNTested		

Operand	Description
	<p>Note: _____</p> <p>TESTed and UNTESTed subsets are available only if you have applied TCA results. See the <i>ASG-SmartTest TCA User Guide</i> for more information.</p> <p>_____</p> <p>Screen subsets:</p> <p>Highlighted HI Excluded X</p> <p>NONHighlighted NHI NONExcluded NX</p> <p>A tagged lines subset of tags appearing in columns 73 through 80 of the Program View screen.</p>
<i>trace-dec-opt</i>	An option as listed on the Program View screen or an option listed on the Trace Decision Options pop-up.

3

Tree View Line Commands

Line Command	Description
<i>F</i> <i>n</i>	First. Redisplays the specified number of excluded lines, starting with the first line in the block. The default is 1.
<i>J</i>	Jump. Returns to the Source View screen at the location corresponding to the line where this command is issued on the Tree View screen.
<i>L</i> <i>n</i>	Last. Redisplays the specified number of excluded lines, starting with the last line in the block. The default is 1.
<i>S</i> <i>n</i>	Show. Redisplays the specified number of excluded lines, starting with the first line in the block. The default is 1.
<i>SS</i>	Show Block. Redisplays a block of lines that were excluded.
<i>X</i> <i>n</i>	Exclude. Excludes a line or group of lines from being displayed. Excluded lines are replaced with a row of dashes. The default is 1.
<i>XX</i>	Exclude Block. Excludes a block of lines from being displayed.
<i>ZI</i>	Zoom In. Performs the ZOOMIN primary command at the line where it is entered.
<i>ZO</i>	Zoom Out. Performs the ZOOMOUT primary command at the line where it is entered.

4

Source View Line Commands

Line Command	Description
.label	Assigns a symbolic name to a source code line. The name must be a period followed by 1-5 alphabetic characters.
F <i>n</i>	First. Redisplays the specified number of excluded lines, starting with the first line in the block. The default is 1.
H <i>n</i>	Highlight. Highlights a line or group of lines. If the value specified is greater than the number of available lines, all remaining lines are highlighted. The default is 1.
HH	Highlight Block.
L <i>n</i>	Last. Redisplays the specified number of excluded lines, starting with the last line in the block. The default is 1.
S <i>n</i>	Show. Redisplays the specified number of excluded lines, starting with the first line in the block. The default is 1.
SS	Show Block. Redisplays a block of lines that were excluded.
X <i>n</i>	Exclude. Excludes a line or group of lines from being displayed. Excluded lines are replaced with a row of dashes. The default is 1.
XX	Exclude Block. Excludes a block of lines from being displayed.

5

Analyze Options

Options		
BUF(<i>nnnnnn</i> K) BUF= <i>nnnnnn</i> K	IO(<i>x, x, . . . x</i>) IO= <i>x</i> NOIO	RETurn(<i>x, x, . . . x</i>) RETurn= <i>x</i> NORETurn(<i>x, x, . . . x</i>) NORETurn= <i>x</i>
COBOL370 COBOLII COB2R3 NOCOBOLII	LANGLVL(<u>1</u> / <u>2</u>) lineCNT= <u>60</u>	SEQ NOSEQ
DB2LIB= <i>xxxxxxxx . xxxxx</i> . <i>xxxxxx</i>	MAIN	SOUrce NOSOUrce
DB2PLAN= <i>xxxxxxxxxx</i>	MBRERCNT= <i>nnnn</i>	spACE <u>1</u> / <u>2</u> / <u>3</u>
DYNCall NODYNCall	Output(<i>x, x, . . . x</i>) Output= <i>x</i> NOOutput(<i>x, x, . . . x</i>) NOOutput= <i>x</i>	SQLID= <i>nnnnnnnnnn</i> SQLID(<i>nnnnnnnnnn, nnnnnn</i> <i>nnn, nnnnnnnnn</i>)

Options		
fLAGW fLAGE fLAG(<i>x</i>)	PROgram(<i>xxxxxxxxxxxx</i>)	SUBSYS= <i>xxxx</i>
Input(<i>x, x, . . . x</i>) Input= <i>x</i> NOInput(<i>x, x, . . . x</i>) NOInput= <i>x</i>	RECur NORECur	XLIVE XMEM

6

VIASUB/VIASUBDS Parameters

Parameters		
AKR(XXXXXX)	OUTPUT(XXXXXX)	SD <u>NOSD</u>
AOPT(XXXXXX)	<u>PANEL</u> NOPANEL	SDR <u>NOSDR</u>
<u>CMPL</u> NOCMPL	PGM(XXXXXX) PROONLY	SDX <u>NOSDX</u>
<u>DSCHK</u> NODSCHK	<u>REUS</u> NOREUS	<u>ST</u> NOST
EDIT	<u>ENS</u> NOENS	<u>STX</u> NOSTX
<u>INS</u> NOINS		

7

PF Key

Primary Defaults

PF Keys		
PF1/13 HELP	PF2/14 SPLIT	PF3/15 END
PF4/16 RPREF	PF5/17 RFIND	PF6/18 FX
PF7/19 UP	PF8/20 DOWN	PF9/21 SWAP
PF10/22 BRANCH	PF11/23 BRANCH BACKUP	PF12/24 RECALL

Suggested Alternate PF Keys

PF Keys		
PF1/13	PF2/14	PF3/15
HELP COMMANDS	SPLIT	END
PF4/16	PF5/17	PF6/18
RETURN	REDO	SCROLL
PF7/19	PF8/20	PF9/21
ZOOMIN	ZOOMOUT	SWAP
PF10/22	PF11/23	PF12/24
LEFT	RIGHT	RECALL MSG

8

Action Bar Equivalents To Commands

Command	Pull-Down	Action; Option
ALLOCDEF	Options	Product Allocations
ANALYZE	File	Compile/Analyze
BRANCH	Search	Branch
CALL	File	Open
CANCEL	File	Close
COPY	Options	Scratchpad; Copy
DELETE	Options	Scratchpad; Delete
EQUATE	Options	Scratchpad; Equate
EXCLUDE	Search	Data, Label, Paragraph, String, Subset, Perform, Program, Mark, Line, or Any
	View	Exclude
EXECUTE	File	Execute Script
FIND	Search	String

Command	Pull-Down	Action; Option
FINDXTND	Search	Data, Label, Paragraph, String, Subset, Perform, Program, Mark, Line, or Any
FLOW	Logic	All actions
GOBACK	File	Close
HELP	Help	All actions
HIGH	Search	Data, Label, Paragraph, String, Subset, Perform, Program, Mark, Line, or Any
KEEP	View	Keep
KEYS	Options	PF Keys
LEVELS	View	Levels
LIST	List	All actions
LOCATE	Search	Line
LPRINT	Search	Data, Label, Paragraph, String, Subset, Perform, Program, Mark, Line, or Any
LPUNCH	Search	Data, Label, Paragraph, String, Subset, Perform, Program, Mark, Line, or Any
MARK	Options	Scratchpad; Mark
MERGE	Options	Scratchpad; Merge

Action Bar Equivalents To Commands

Command	Pull-Down	Action; Option
PARMDEF	Options	Product Parameters
PREF	View	Paragraph X-Ref
PRINTLOG	Options	Log/List/Punch
PRINTLST	Options	Log/List/Punch
PRODLVL	Help	About
PROGRAM	File	Open
REFRESH	Options	Refresh
RENAME	Options	Scratchpad; Rename
RESET	View	Reset
SAVE	File	Save
SCROLL	Search	Data, Label, Paragraph, String, Subset, Perform, Program, Mark, Line, or Any
SET	Options	Modes
SOURCEVIEW	View	Source
STRUCTURE-VIEW	View	Structure
TRACE	Logic	All actions
TREEVIEW	View	Tree
VIEW	File	Open

Command	Pull-Down	Action; Option
ZOOMIN	View	Zoom in
ZOOMOUT	View	Zoom out

